

Title (en)  
SECONDARY BATTERY AND TOP COVER COMPONENT THEREOF

Title (de)  
SEKUNDÄRBATTERIE UND OBERE ABDECKUNGSKOMPONENTE DAVON

Title (fr)  
BATTERIE SECONDAIRE ET SON COMPOSANT DE COUVERTURE SUPÉRIEURE

Publication  
**EP 3723153 A1 20201014 (EN)**

Application  
**EP 19189288 A 20190731**

Priority  
CN 201910280648 A 20190409

Abstract (en)  
The present disclosure relate to the technical field of secondary batteries, and in particular, to a secondary battery and a top cover component thereof. The top cover component (10) provided by the present disclosure includes a top cover plate (1) having an electrode lead-out hole (11), and a second sealing portion and a second insulating portion stretching into the electrode lead-out hole, and the second sealing portion and the second insulating portion are at least partially staggered to each other on the radial direction of the electrode lead-out hole and are at least partially overlapped on the height direction. Based on this, a direct discharge clearance can be effectively blocked, and the creepage distance can be prolonged, thereby being conducive to reducing the risk of on fire or explosion and other problems of the secondary battery while withstanding a high voltage.

IPC 8 full level  
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**H01M 50/583** (2021.01); **H01M 50/55** (2021.01)

CPC (source: CN EP US)  
**H01M 50/147** (2021.01 - CN EP US); **H01M 50/15** (2021.01 - EP); **H01M 50/176** (2021.01 - CN EP US); **H01M 50/188** (2021.01 - CN EP US);  
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**H01M 50/55** (2021.01 - CN EP US); **H01M 2200/103** (2013.01 - CN EP); **H01M 2220/20** (2013.01 - CN); **Y02E 60/10** (2013.01 - EP)

Citation (search report)  
• [A] EP 2846378 A1 20150311 - SAMSUNG SDI CO LTD [KR]  
• [A] EP 3451411 A1 20190306 - CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]  
• [A] EP 3331051 A1 20180606 - CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]  
• [A] EP 3451410 A1 20190306 - CONTEMPORARY AMPEREX TECHNOLOGY CO LTD [CN]

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Designated extension state (EPC)  
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DOCDB simple family (publication)  
**EP 3723153 A1 20201014**; CN 110176557 A 20190827; CN 110176557 B 20240405; JP 2022527733 A 20220606; JP 7148741 B2 20221005;  
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**EP 19189288 A 20190731**; CN 201910280648 A 20190409; CN 2020083505 W 20200407; JP 2021555807 A 20200407;  
US 201916574966 A 20190918